

AMENDMENTS TO THE CLAIMS

Please amend Claims 32, 48, 53 and 72 as presented herein. Please add new Claims 78 – 81 as presented herein.

1. – 31. (Canceled)

32. (Currently Amended) An implantable intraocular lens for placement within an eye having a capsular bag connected to a ciliary muscle via zonules, comprising:

an optic, ~~the optic~~ disposed about an optical axis and including an anterior surface and a posterior surface, the optic configured to be biased to be in an un-accommodated state in the absence of any force;

a positioning member operably coupled with the optic and responsive to relaxation of zonules within an eye in order to change the shape of the optic from a first optic shape to a second optic shape, where the second optic shape has a thickness that is greater than the first optic shape, the second optic shape corresponding to an accommodated state;

the positioning member comprising an outer body and a plurality of spaced-apart arms extending radially between the optic and the outer body in an equatorial plane when the optic has the first shape and when the optic has the second shape, the outer body being arcuate when viewed in cross-section along a plane containing the optical axis, the outer body including an anterior segment located at least partially anterior to the anterior surface of the optic and a posterior segment located at least partially posterior to the posterior surface of the optic, the outer body being configured to engage the capsular bag;

wherein accommodation in response to a relaxation of the zonules is achieved when the optic changes from the first shape to the second shape.

33. (Previously Presented) The lens of claim 32, wherein the lens is disposed on either side of a lens plane which approximately bisects the lens, the optic being connected to the positioning member so that the optic lies substantially along the lens plane.

34. (Canceled)

35. (Previously Presented) The lens of claim 32, the arms extending along a line from the optic when the optic has the first optic shape and when the optic has the second optic shape.

36. (Previously Presented) The lens of claim 32, the outer body comprising a plurality of spaced-apart legs configured to engage a capsule of an eye.

37. (Canceled)

38. (Previously Presented) The lens of claim 36, wherein the legs are arcuate in cross-section and include a bight, each of the arms being joined to a corresponding one of the spaced-apart legs at the bight.

39. (Previously Presented) The lens of claim 32, the material being selected from the group consisting of gels, silicone, silicone blends, refractive liquids, elastomeric materials, rubbers, acrylates, and mixtures of the foregoing.

40. (Previously Presented) The lens of claim 32, the optic being substantially between and captively retained by the anterior and posterior segments of the outer body.

41. (Previously Presented) The lens of claim 32, the lens having an equatorial diameter of from about 8 to 12 mm.

42. (Previously Presented) The lens of claim 32, the lens having a polar height of from about 2 to 5 mm.

43. (Previously Presented) The lens of claim 32, the lens having a diopter value of from about 16 to 26.

44. (Previously Presented) The lens of claim 32, wherein the outer body is circumferentially disposed completely around the optic, the outer body having a central opening disposed about and including the optical axis, the central opening being anterior to the anterior surface of the optic.

45. (Previously Presented) The lens of claim 32, wherein the outer body defines an equatorial segment, the anterior and posterior segments of the outer body being located radially inwardly from the equatorial segment.

46. (Previously Presented) The lens of claim 32, wherein the anterior and posterior segments are joined by an equatorial portion configured to provide substantially conforming contact with the inner surface of an equatorial portion of a capsule of an eye.

47. (Previously Presented) The lens of claim 32, wherein the anterior segments are joined by an annular portion, the annular portion located anterior to the optic.

48. (Currently Amended) An implantable intraocular lens, comprising:

a central polar axis;

an optic biased into an un-accommodated state in the absence of any force; and

a positioning member comprising an outer body including a plurality of anterior segments and a plurality of corresponding posterior segments joined by a plurality of corresponding bights, the outer body being configured to engage the capsular bag, the outer body being configured to engage the capsular bag;

a plurality of arms joining the optic to the positioning member at the bights;

the positioning member operably coupled with the optic and responsive to ciliary body movement in order to change the shape of the optic between a first optic shape and a second optic shape having a thickness that is greater than the thickness of the first optic shape, the anterior segments circumferentially disposed about the central polar axis so as to define a central opening of the outer body, the central opening disposed about and including the central polar axis;

wherein for an accommodated state or an un-accommodated state of the intraocular lens, an entirety of the optic is disposed between a first plane perpendicular to the central polar axis and a second plane perpendicular to the central polar axis, the first plane including the central opening and the second plane intersecting the posterior segments; and

wherein the arms extend radially between the optic and the outer body in an equatorial plane when the optic has the first shape and when the optic has the second shape.

49. (Previously Presented) The lens of claim 48, further comprising an outside dimension along the central polar axis that is from about 1 mm to 5 mm.

50. (Previously Presented) The lens of claim 48, wherein the second optic shape has a thickness that is greater than the first optic shape.

51. (Previously Presented) The lens of claim 48, wherein the anterior segments intersect a first plane that is perpendicular to the central polar axis, the posterior segments intersect a second plane that is perpendicular to the central polar axis, and the entire optic is disposed between the first plane and the second plane when the optic has the first shape and when the optic has the second shape.

52. (Previously Presented) The lens of claim 48, wherein the posterior segments are disposed about a second central opening of the outer body, the second central opening disposed about and crossing the central polar axis, the second central opening being located behind the optic.

53. (Currently Amended) An implantable intraocular lens, comprising:
an optic disposed about an axis, the optic being biased to a dis-accommodated state in the absence of any force; and

a positioning member comprising a plurality of circumferentially spaced-apart arms joined to a plurality of circumferentially spaced-apart positioning elements members, each of the positioning members having an arcuate shape when viewed in cross-section along a plane containing the axis, the members being joined with the optic via the arms;

the positioning member operably coupled with the optic and responsive relaxation of zonules within an eye in order to change the shape of the optic between a first optic shape and a second optic shape having a thickness that is greater than the first optic shape;

wherein the arms extend radially between the optic and the outer body in an equatorial plane when the optic has the first shape and when the optic has the second shape, wherein the outer body is configured to engage the equatorial plane of the capsular bag.

54. (Previously Presented) The lens of claim 53, wherein the lens is disposed on either side of a plane passing through an equator of an outer body of the positioning member, the arms and optic disposed to lie substantially within the plane.

55. (Canceled)

56. (Previously Presented) The lens of claim 53, wherein the members include anterior and posterior segments, the anterior segments intersect a first plane that is perpendicular to the axis, the posterior segments intersect a second plane that is perpendicular to the axis, and an entirety of the optic is disposed between the first plane and the second plane when the optic has the first shape and when the optic has the second shape.

57. (Previously Presented) The lens of claim 53, wherein the optic is disposed about the axis, the positioning member is circumferentially disposed about the optic, wherein the positioning member includes a central opening disposed about and crossing the axis, the central opening being located anterior to the optic.

58. (Previously Presented) The lens of claim 53, wherein the members define an outer surface of the positioning member, the outer surface having an equator, the surface extending radially inward from the equator, the outer surface being arcuate in cross-section in a plane parallel to, and passing through, the axis when the optic has the first optic shape and the second optic shape.

59. (Previously Presented) The lens of claim 53, wherein the members include an equatorial portion having a size and shape to substantially conform with an inner surface of an equatorial portion of a capsule of an eye.

60. (Previously Presented) The lens of claim 32, wherein the optic includes liquid material or a gel material.

61. (Previously Presented) The lens of claim 60, wherein the liquid material or the gel material is enveloped within a capsule formed of a thin continuous wall.

62. (Previously Presented) The lens of claim 32, wherein the optic comprises a capsule formed of a thin continuous wall including an anterior wall portion and a posterior wall portion, the capsule enveloping a discrete liquid material or a discrete gel material disposed between the wall portions thereof.

63. (Previously Presented) The lens of claim 48, wherein the optic includes liquid material or a gel material.

64. (Previously Presented) The lens of claim 63, wherein the liquid material or the gel material is enveloped within a capsule formed of a thin continuous wall.

65. (Previously Presented) The lens of claim 48, wherein the optic comprises a capsule formed of a thin continuous wall including an anterior wall portion and a posterior wall portion, the capsule enveloping a discrete liquid material or a discrete gel material disposed between the wall portions thereof.

66. (Previously Presented) The lens of claim 53, wherein the optic includes liquid material or a gel material.

67. (Previously Presented) The lens of claim 66, wherein the liquid material or the gel material is enveloped within a capsule formed of a thin continuous wall.

68. (Previously Presented) The lens of claim 53, wherein the optic comprises a capsule formed of a thin continuous wall including an anterior wall portion and a posterior wall portion, the capsule enveloping a discrete liquid material or a discrete gel material disposed between the wall portions thereof.

69. (Previously Presented) The lens of claim 32, wherein the optic includes liquid material enveloped within a capsule formed of a thin continuous wall.

70. (Previously Presented) The lens of claim 32, wherein the anterior segments are joined by an annular portion located anterior to the optic and the posterior segments are joined by an annular portion located posterior to the optic.

71. (Previously Presented) The lens of claim 32, wherein the anterior segments intersect a first plane that is perpendicular to the optical axis, the posterior segments intersect a second plane that is perpendicular to the optical axis, and the entire optic is disposed between the first plane and the second plane when the optic has the first shape and when the optic has the second shape.

72. (Currently Amended) An implantable intraocular lens, comprising:
an optic disposed about an optical axis and biased to be in a dis-accommodated state in the absence of any force, the optic including an anterior surface and a posterior surface, the optic having a first optic-shape and a second optic-shape, the first optic-shape comprising a first optic-diameter and a first thickness, the second optic-shape comprising a second optic-diameter and a second thickness, wherein the second optic-diameter is less than the first optic-diameter and the second thickness is greater than the first thickness, the optic being biased to the first shape;

a positioning member comprising an outer body and a plurality of spaced-apart arms extending between the optic and the outer body, the outer body being arcuate when viewed in cross-section along a plane containing the optical axis, the outer body including an anterior segment having a portion located anterior to an entirety of the anterior surface of the optic and a posterior segment having a portion located posterior to the an entirety of the posterior surface of the optic, the outer body being configured to engage the

capsular bag, the optic being connected to the positioning member at a location central to the outer body in a direction along the optical axis;

wherein, in response to ciliary body movement of an eye into which the lens is placed, accommodation is produced by a change in optic power due to a change in the shape of the optic from the first optic-shape to the second optic-shape as the arms of the positioning member push radially inward toward the optic.

73. (Previously Presented) The lens of claim 32, wherein movement of the arms causes the optic to change from the first shape to a second shape.

74. (Previously Presented) The lens of claim 73, wherein the arms are formed of a material that is stiffer or less resilient than a material of the optic.

75. (Previously Presented) The lens of claim 73, wherein the arms are configured to apply a radial compressive force to the optic.

76. (Previously Presented) The lens of claim 73, wherein movement of the arms compresses the optic to cause the optic to change from the first shape to a second shape.

77. (Previously Presented) The lens of claim 32, wherein the arms are formed of a material that is stiffer or less resilient than a material of the optic and wherein the movement of an inner portion of the stiffer or less resilient arms towards a central zone of the flexible or more resilient optic causes the flexible or more resilient optic to change from the first shape to a second shape.

78. (New) The lens of claim 32, wherein the optic has a uniform refractive index.

79. (New) The lens of claim 48, wherein the optic has a uniform refractive index.

80. (New) The lens of claim 53, wherein the optic has a uniform refractive index.

81. (New) The lens of claim 72, wherein the optic has a uniform refractive index.